

Appl. No. : 10/817,591  
Filed : April 2, 2004

### AMENDMENTS TO THE CLAIMS

1-35. (Canceled)

36. (Previously presented) A method of increasing the titer of viral antigen-specific IgG antibodies in a subject in need thereof comprising:

identifying a subject in need of an increase in titer of IgG antibodies that are specific for a viral antigen; and

providing said subject an immunogenic composition comprising ribavirin and a nucleic acid molecule encoding said viral antigen.

37. (Previously presented) The method of Claim 36, wherein said viral antigen is a hepatitis antigen.

38. (Previously presented) The method of Claim 37, wherein said hepatitis antigen is an antigen from hepatitis A virus, hepatitis B virus, or hepatitis C virus.

39. (Previously presented) The method of Claim 38, wherein said viral antigen is a hepatitis C viral antigen.

40. (Previously presented) The method of Claim 39, wherein said viral antigen is an NS3 antigen.

41. (Previously presented) The method of Claim 39, wherein said viral antigen is an NS4A antigen.

42. (Previously presented) The method of Claim 36, wherein the amount of ribavirin is at least 0.25mg.

43. (Previously presented) The method of Claim 36, wherein the amount of ribavirin is between about 0.25mg and 100mg.

44. (Previously presented) The method of Claim 36, wherein the amount of ribavirin is between about 0.25mg and 25mg.

45. (Previously presented) The method of Claim 36, wherein the amount of ribavirin is between about 0.25mg and 1mg.

46. (Previously presented) The method of Claim 36, wherein the amount of ribavirin is at least 0.1mg ribavirin per kg body weight of a subject receiving said composition.

**Appl. No.** : **10/817,591**  
**Filed** : **April 2, 2004**

47. (Previously presented) The method of Claim 36, wherein the amount of ribavirin is between about 0.1mg ribavirin to about 2.0 mg ribavirin per kg body weight of a subject receiving said composition.

48. (Previously presented) The method of Claim 36, wherein the amount of ribavirin is between about 1.1mg ribavirin to about 2.0 mg ribavirin per kg body weight of a subject receiving said composition.

49. (Previously presented) The method of Claim 36, wherein the amount of ribavirin is between about 2.1mg ribavirin to about 3.0mg ribavirin per kg body weight of a subject receiving said composition.

50. (Previously presented) The method of Claim 36, wherein the amount of ribavirin is between about 3.1mg ribavirin to about 4.0mg ribavirin per kg body weight of a subject receiving said composition.

51. (Previously presented) A method of enhancing a T cell response to a viral antigen in a subject in need thereof comprising:

identifying a subject in need of an improvement in a T cell response to a viral antigen; and

providing said subject an immunogenic composition comprising ribavirin and a nucleic acid molecule encoding said viral antigen.

52. (Previously presented) The method of Claim 51, wherein said viral antigen is a hepatitis antigen.

53. (Previously presented) The method of Claim 52, wherein said hepatitis antigen is an antigen from hepatitis A virus, hepatitis B virus, or hepatitis C virus.

54. (Previously presented) The method of Claim 53, wherein said viral antigen is a hepatitis C viral antigen.

55. (Previously presented) The method of Claim 54, wherein said viral antigen is an NS3 antigen.

56. (Previously presented) The method of Claim 54, wherein said viral antigen is an NS4A antigen.

57. (Previously presented) The method of Claim 51, wherein the amount of ribavirin is at least 0.25mg.

Appl. No. : 10/817,591  
Filed : April 2, 2004

58. (Previously presented) The method of Claim 51, wherein the amount of ribavirin is between about 0.25mg and 100mg.

59. (Previously presented) The method of Claim 51, wherein the amount of ribavirin is between about 0.25mg and 25mg.

60. (Previously presented) The method of Claim 51, wherein the amount of ribavirin is between about 0.25mg and 1mg.

61. (Previously presented) The method of Claim 51, wherein the amount of ribavirin is at least 0.1mg per kg body weight of a subject receiving said composition.

62. (Previously presented) The method of Claim 51, wherein the amount of ribavirin is between about 0.1mg ribavirin to about 1.0 mg ribavirin per kg body weight of a subject receiving said composition.

63. (Previously presented) The method of Claim 51, wherein the amount of ribavirin is between about 1.1mg ribavirin to about 2.0 mg ribavirin per kg body weight of a subject receiving said composition.

64. (Previously presented) The method of Claim 51, wherein the amount of ribavirin is between about 2.1mg ribavirin to about 3.0mg ribavirin per kg body weight of a subject receiving said composition.

65. (Previously presented) The method of Claim 51, wherein the amount of ribavirin is between about 3.1mg ribavirin to about 4.0 mg ribavirin per kg body weight of a subject receiving said composition.

66. (Currently amended) The method of Claim 36, wherein said nucleic acid molecule ~~has the sequence of SEQ ID NO: 16,~~ comprises a nucleic acid sequence encoding at least 8 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

67. (Currently amended) The method of Claim 66, wherein said nucleic acid molecule ~~comprises at least 1000 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 10 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

68. (Currently amended) The method of Claim 66, wherein said nucleic acid molecule ~~comprises at least 500 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 12 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

Appl. No. : 10/817,591  
Filed : April 2, 2004

69. (Currently amended) The method of Claim 66, wherein said nucleic acid molecule comprises ~~at least 200 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 20 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

70. (Currently amended) The method of Claim 66, wherein said nucleic acid molecule comprises ~~at least 100 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 50 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

71. (Currently amended) The method of Claim 66, wherein said nucleic acid molecule comprises ~~at least 50 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 100 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

72. (Currently amended) The method of Claim 66, wherein said nucleic acid molecule comprises ~~at least 20 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 250 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

73. (Currently amended) The method of Claim 66, wherein said nucleic acid molecule comprises ~~at least 12 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 500 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

74. (Currently amended) The method of Claim 51, wherein said nucleic acid molecule comprises a nucleic acid sequence encoding at least 8 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

75. (Currently amended) The method of Claim 74, wherein said nucleic acid molecule comprises ~~at least 1000 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 10 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

76. (Currently amended) The method of Claim 74, wherein said nucleic acid molecule comprises ~~at least 500 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 12 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

77. (Currently amended) The method of Claim 74, wherein said nucleic acid molecule comprises ~~at least 200 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 20 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

Appl. No. : 10/817,591  
Filed : April 2, 2004

78. (Currently amended) The method of Claim 74, wherein said nucleic acid molecule comprises ~~at least 100 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 50 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

79. (Currently amended) The method of Claim 74, wherein said nucleic acid molecule comprises ~~at least 50 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 100 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

80. (Currently amended) The method of Claim 74, wherein said nucleic acid molecule comprises ~~at least 20 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 250 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

81. (Currently amended) The method of Claim 74, wherein said nucleic acid molecule comprises ~~at least 12 consecutive nucleotides of SEQ ID NO: 16~~ a nucleic acid that encodes at least 500 consecutive amino acids of the sequence of SEQ ID NO: 17, or the complement thereof.

82. (New) The method of Claim 73, wherein said nucleic acid molecule comprises SEQ ID NO: 16.

83. (New) The method of Claim 73, wherein said nucleic acid molecule consists essentially of the nucleic acid of SEQ ID NO: 16.

84. (New) The method of Claim 73, wherein said nucleic acid molecule consists of the nucleic acid of SEQ ID NO: 16.

85. (New) The method of Claim 81, wherein said nucleic acid molecule comprises SEQ ID NO: 16.

86. (New) The method of Claim 81, wherein said nucleic acid molecule consists essentially of the nucleic acid of SEQ ID NO: 16.

87. (New) The method of Claim 81, wherein said nucleic acid molecule consists of the nucleic acid of SEQ ID NO: 16.